

7

Virginia

SOL

GRADE 5

MATHEMATICS

PRACTICE TESTS

✓
PRACTICE
PREPARE
SUCCEED

★★★

Comprehensive Standards-Aligned
Review for Strong Grade 5
Math Performance



$$\frac{3}{4} + \frac{2}{4} = \frac{5}{4}$$

$$2.4 + 1.6 = 4.0$$

$$A = \frac{bh}{2}$$



**7 FULL-LENGTH
PRACTICE TESTS**

Realistic style
questions



**STANDARDS-
ALIGNED**

Covers all Grade 5
standards



BUILD CONFIDENCE

Target weak areas
and improve
performance



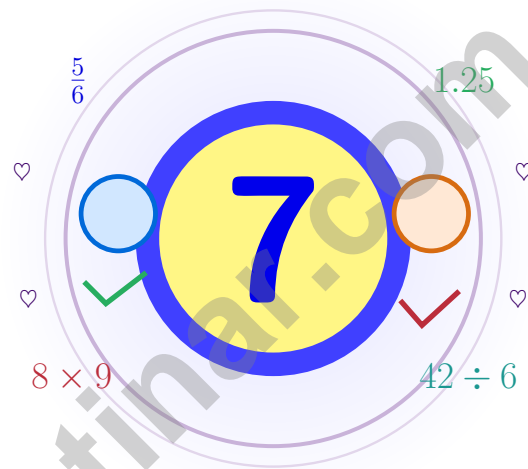
ACHIEVE SUCCESS

Develop skills,
stay prepared,
excel on test day

★ PRACTICE TODAY. PERFORM TOMORROW. **SUCCEED** FOREVER. ★

7 Virginia SOL Grade 5 Math Practice Tests

This book is here to help you practice, reflect, and rise across seven tests



Seven full tests, a concise review, and helpful support that turns Grade 5 practice in The Old Dominion into steady, confident growth from page one to the final check.

Jay Daie and Reza Nazari



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Virginia, Your Seven-Test Trail Begins

Seven full tests woven into one calm, steady practice path

Dear Virginia Math Trail Crew

This practice book is your steady companion for seven tests, not a place to be perfect. Math is like the Blue Ridge Parkway – the careful drive rewards every curve with a wider view.

Use these seven tests like stepping-stones. Take one test at a time, check your answers honestly, and notice which skills need more attention. Small improvements add up across seven rounds.

Notice

Notice the numbers, units, and any tricky words.

Sketch

Sketch a picture, table, or quick number line.

Confirm

Confirm your answer with an estimate or check.

A strong habit for Virginia mathematicians: read carefully, estimate when it helps, show your steps, and keep going even when a question feels tricky. That is how steady math confidence is built.

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Scan me



Your Seven-Step Trail Plan

A simple routine that turns practice into progress

Step 1: Plan

Plan a quiet hour for one full test.
Spend a few minutes waking up your memory before the test begins.

Step 2: Practice

Take the test with calm focus.
Work in a calm spot and focus on careful thinking before speed.

Step 3: Inspect

Inspect every answer like a careful builder.
Circle missed questions and notice which topics keep showing up.

Step 4: Adjust

Adjust what needs adjusting for the next test.
Read the explanation, repair the work, and bring that lesson into the next test.

A Good 7-Week Virginia Rhythm

Week 1	Take Test 1 like the first mile on the parkway.
Week 2	Take Test 2 and slow down on word problems.
Week 3	Take Test 3 and lift fraction and decimal work.
Week 4	Take Test 4 and pay close attention to labels and units.
Week 5	Take Test 5 and compare your habits with your first test.
Week 6	Take Test 6 and practice staying calm during tricky questions.
Week 7	Take Test 7 with calm, careful, confident driving.



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Grade 5 Mathematics Reference Materials

PERIMETER AND AREA

Perimeter of Rectangle $P = 2l + 2w$ or $P = 2(l + w)$

Area of Rectangle $A = l \times w$

Area of Triangle $A = \frac{1}{2} \times b \times h$

Volume of Rectangular Prism $V = l \times w \times h$

LENGTH

Customary

1 foot (ft) = 12 inches (in.)

1 yard (yd) = 3 feet (ft)

1 yard (yd) = 36 inches (in.)

Metric

1 meter (m) = 100 centimeters (cm)

1 centimeter (cm) = 10 millimeters (mm)

1 kilometer (km) = 1,000 meters (m)

CAPACITY

Customary

1 cup (c) = 8 fluid ounces (fl oz)

1 pint (pt) = 2 cups (c)

1 quart (qt) = 2 pints (pt)

1 gallon (gal) = 4 quarts (qt)

Metric

1 liter (L) = 1,000 milliliters (mL)

WEIGHT AND MASS

Customary

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TIME

1 minute (min) = 60 seconds (sec) 1 week = 7 days

1 hour (hr) = 60 minutes (min) 1 year = 12 months

1 day = 24 hours (hr) 1 year = 52 weeks



1) What is $9.3 \div 100$?

A. 0.93

C. 930

B. 93

D. 0.093

2) Compare without computing: $(45 - 15) + 8$ $(45 - 15) - 8$

A. $>$

C. $=$

B. $<$

D. Cannot tell

3) A wall is $\frac{5}{6}$ meter wide. A painter paints $\frac{3}{5}$ of the wall. How wide is the painted section?
Give the answer in simplest form.

A. $\frac{8}{11}$ meter

C. $\frac{2}{3}$ meter

B. $\frac{15}{11}$ meter

D. $\frac{1}{2}$ meter

4) A board is 12 feet long. It is cut into pieces that are each one third of a foot. Which division equation matches the situation?

A. $\frac{1}{3} \div 12 = n$

C. $12 \div \frac{1}{3} = n$

B. $12 \times \frac{1}{3} = n$

D. $12 + \frac{1}{3} = n$

5) Growing cross pattern:



Fig 1



Fig 2

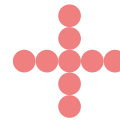


Fig 3

How many dots in Figure 4?

A. 11

C. 15

B. 13

D. 17



6) A juice blend has $\frac{3}{5}$ orange juice and $\frac{1}{4}$ apple juice. Fraction that is water?

A. $\frac{3}{20}$

B. $\frac{7}{20}$

C. $\frac{4}{9}$

D. $\frac{1}{20}$

7) What is $13 \div \frac{1}{4}$?

A. 36

B. 48

C. 52

D. 64

8) A place-value chart shows tenths, hundredths, and thousandths. For 11.247, which digit is in the thousandths place?

Tens	Ones	Tenths	Hundredths	Thousandths
1	1	2	4	7

A. 1

B. 2

C. 4

D. 7

9) A classroom aquarium has volume 336 cm^3 and base area 56 cm^2 . How deep is the water?

A. 6 cm

B. 5 cm

C. 4 cm

D. 7 cm

10) What is 121×5 ?

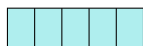
A. 600

B. 605

C. 610

D. 615

11) What is $\frac{1}{8} \div 5$?



$\frac{1}{8}$ split into 5

A. $\frac{5}{8}$

B. $\frac{1}{40}$

C. $\frac{1}{13}$

D. $\frac{1}{3}$



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- 1) A class reward chart tracks two patterns. Tickets start at 20 and add 5 each week. Points start at 4 and add 1 each week. Which relationship is shown?

Week	Tickets	Points
0	20	4
1	25	5
2	30	6
3	35	7

- A. Tickets are 5 times the points each week
- B. Tickets are 4 times the points each week
- C. Points are 5 times the tickets each week
- D. Tickets and points are equal each week
- 2) A school orders 34 boxes of supplies. Each box contains 10 items. How many items does the school receive in total?
- A. 34
- B. 3400
- C. 304
- D. 340
- 3) Which set of equivalent fractions shows $\frac{5}{6}$ and $\frac{3}{8}$ rewritten with LCD 24?
- A. $\frac{15}{24}$ and $\frac{9}{24}$
- B. $\frac{20}{24}$ and $\frac{12}{24}$
- C. $\frac{20}{24}$ and $\frac{9}{24}$
- D. $\frac{15}{24}$ and $\frac{12}{24}$
- 4) A cargo container has internal volume based on dimensions 24 feet long, 8 feet wide, and 8 feet tall. If each identical shipment uses 64 cubic feet of space and no space is wasted, how many shipments can the container hold?
- A. 12 items
- B. 18 items
- C. 24 items
- D. 30 items



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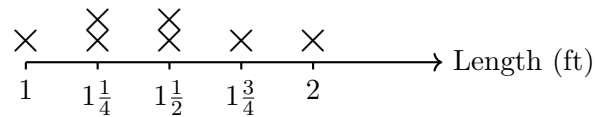
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1) In the ordered pair (x, y) , what does the letter y represent?

- A. How far right
 B. How far up
 C. The origin
 D. The x-axis

2) The line plot shows the lengths, in feet, of boards used for a project:



What is the total length of all the boards?

- A. 8 feet
 B. $11\frac{1}{2}$ feet
 C. 10 feet
 D. $9\frac{1}{4}$ feet
- 3) A polygon has 6 sides, 6 vertices, and all sides and angles equal. What name can be used for this shape?

Record your answer in the space provided.

4) A rectangular swimming pool holds 18,000 cubic feet of water. The length is 60 feet and the width is 30 feet. What is the depth of the pool?

- A. 8 feet
 B. 10 feet
 C. 12 feet
 D. 15 feet



Practice Test Answer Keys

How to use this section:

1. check your answer
2. circle missed questions
3. rework them before reading the explanation

Good correction habits build strong scores.

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Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice D is correct.** **(5.NS.2)** Dividing by 100 moves the decimal 2 places left: $9.3 \rightarrow 0.93 \rightarrow 0.093$.
- 2) **Choice A is correct.** **(5.CE.4)** Both expressions start with the same base amount, $(45 - 15)$. Adding 8 moves the value up, while subtracting 8 moves it down.
- 3) **Choice D is correct.** **(5.CE.2)** $\frac{3}{5} \times \frac{5}{6} = \frac{15}{30}$, which simplifies to $\frac{1}{2}$ meter.
- 4) **Choice C is correct.** **(5.CE.2)** Use total amount divided by the size of one piece. The equation is $12 \div \frac{1}{3} = n$.
- 5) **Choice B is correct.** **(5.CE.4)** The dot counts are 1, 5, 9, and then 13. Each new figure adds 4 dots.
- 6) **Choice A is correct.** **(5.CE.2)** Orange and apple: $\frac{3}{5} + \frac{1}{4} = \frac{12}{20} + \frac{5}{20} = \frac{17}{20}$. Water: $1 - \frac{17}{20} = \frac{3}{20}$.
- 7) **Choice C is correct.** **(5.CE.2)** $13 \div \frac{1}{4} = 13 \times 4 = 52$.
- 8) **Choice D is correct.** **(5.NS.2)** The thousandths place is the third position to the right of the decimal point. In 11.247, the digit 7 is in the thousandths place.
- 9) **Choice A is correct.** **(5.MG.1)** The base area is 56 square centimeters. Since $336 \div 56 = 6$, the water is 6 cm deep.
- 10) **Choice B is correct.** **(5.MG.2)** Multiply: $121 \times 5 = (100 \times 5) + (20 \times 5) + (1 \times 5) = 500 + 100 + 5 = 605$.
- 11) **Choice B is correct.** **(5.CE.2)** $\frac{1}{8} \div 5 = \frac{1}{8} \times \frac{1}{5} = \frac{1}{40}$.
- 12) **Choice B is correct.** **(5.CE.4)** The parentheses give $20 + 10 = 30$. Then $3 \times 30 = 90$, and $150 - 90 = 60$.
- 13) **Choice D is correct.** **(5.NS.2)** Option D is false because $0.023 \times 1000 = 23$. The others are correct.
- 14) **Choice D is correct.** **(5.MG.1)** The x-coordinate (4) is the number of cars, and the y-coordinate (16) is the number of wheels. So 4 cars have 16 wheels total.
- 15) **Choice A is correct.** **(5.NS.2)** Both J at (2, 4) and K at (7, 4) have y-coordinate 4, so they share the same y-coordinate.
- 16) **Choice C is correct.** **(5.MG.2)** $V = B \times h = 24 \times 5 = 120 \text{ in}^3$. The height is 5 inches, so the answer must be in cubic inches.
- 17) **Choice B is correct.** **(5.NS.2)** Multiplying by 10 moves the decimal one place right: $0.003 \rightarrow 0.03$.
- 18) **Choice A is correct.** **(5.CE.2)** Use tenths as the common denominator: $\frac{1}{5} = \frac{2}{10}$. Then $\frac{9}{10} - \frac{2}{10} = \frac{7}{10}$.
- 19) **Choices A, B are correct.** **(5.NS.2)** $7 \times 10^2 = 700$ and $23 \times 10^3 = 23,000$. C should be 50,000, and D should be 600.
- 20) **Choice D is correct.** **(5.MG.1)** Doubling one dimension makes twice as many equal layers or rows. Since the other dimensions stay the same, the total number of cubic units doubles.
- 21) **Choice A is correct.** **(5.CE.4)** Begin with the innermost operation: $2 \times 3 = 6$. That makes the braces $\{4 + 6\} = 10$, so the full expression is $30 - 10 = 20$.
- 22) **The correct answer is 24.** **(5.CE.2)** The least common multiple of 12 and 8 is 24.
- 23) **Choice D is correct.** **(5.MG.2)** Volume of a rectangular prism is length \times width \times height, so $3 \times 4 \times 5$ is correct.
- 24) **Choice B is correct.** **(5.MG.1)** From meters to mm: $\times 10 \times 10 \times 10 = \times 1000$. So $6 \times 1000 = 6000$ mm.
- 25) **Choice A is correct.** **(5.CE.2)** Repeated addition: $\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} = 5 \times \frac{1}{8} = \frac{5}{8}$ of a lap.
- 26) **The correct answer is 1.** **(5.MG.3)** The description says exactly one pair of parallel sides, so the answer is 1 pair.
- 27) **Choice D is correct.** **(5.NS.2)** $180 = 18 \times 10$ and $500 = 5 \times 100$. The nonzero parts make $18 \times 5 = 90$, and the powers of 10 make $10 \times 100 = 1,000$. So $90 \times 1,000 = 90,000$, which has 4 zeros total.
- 28) **Choice C is correct.** **(5.PFA.1)** The model shows: $1 \times 4 = 4$ and $0.5 \times 4 = 2$. Total: $4 + 2 = 6$.
- 29) **The correct answer is 4.** **(5.MG.1)** Each Y value is 4 times the matching X value: $4 \div 1 = 4$, $8 \div 2 = 4$, and so on.
- 30) **Choice C is correct.** **(5.MG.1)** Find both volumes: Bin A is $10 \times 3 \times 4 = 120$, and Bin B is $8 \times 4 \times 4 = 128$. The difference is 8 cubic feet.
- 31) **Choice B is correct.** **(5.CE.1)** The hundredths digit is 9. The thousandths digit is 6. Since $6 \geq 5$, round hundredths up: $9 \rightarrow 10$, which rolls over. The ones digit becomes 5, giving 5.00 inches.
- 32) **Choice D is correct.** **(5.NS.2)** Find each part first: Prism A is $9 \times 4 \times 5 = 180$ cubic meters, and Prism B is $6 \times 2 \times 3 = 36$ cubic meters. Because the parts do not overlap, add them: $180 + 36 = 216$ cubic meters.
- 33) **The correct answer is \$395.50.** **(5.CE.1)** Line up the decimal points and add the two money amounts: $\$189.00 + \$206.50 = \$395.50$. So the sandwich shop earned \$395.50 in all.



Focus and Finish

Dear Student,

★ By completing seven practice tests, you did something that many students never do—you trained your attention. Attention means you can stay with a question long enough to understand it, choose a strategy, and solve it carefully. ★

◇ **Here's what good test-takers know:** a test is not a race. The goal is not to be first—the goal is to be accurate. When you slow down just enough to read, plan, and check, you earn more points. ◇

My Focus Tools

- **Finger-tracking:** follow each line as you read.
- **Underline:** circle key numbers and important words.
- **Mini-plan:** write one word: add, subtract, multiply, divide, draw.
- **Check:** estimate to see if the answer is reasonable.

Your practice matters. Seven tests later, you can focus longer and think more clearly. That will help you on test day—and in everything you learn.

You can email me at reza@testinar.com.

Reza Nazari & Jay Daie
Your Math Coaches (Stay Focused)

PRACTICE TODAY. PERFORM TOMORROW.

Success in math starts with practice! This book provides the **practice, confidence, and skills** your child needs to excel on the Grade 5 Math test and beyond.

KEY BENEFITS:



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Focus on the most important Grade 5 math skills.



STANDARD-ALIGNED

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BUILD CONFIDENCE

Strengthen skills, reduce test anxiety, and boost confidence.



IMPROVE PERFORMANCE

Timed practice helps improve speed and accuracy.



ACHIEVE SUCCESS

Develop strong test-taking skills and achieve your best score!

PERFECT FOR:

✓ Classroom Practice

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✓ Test Preparation

✓ Summer Learning

✓ On-the-Go Practice

✓
PRACTICE
PREPARE
SUCCEED



STRONG SKILLS. BRIGHT FUTURE.

Give your child the tools they need to succeed in math and in life!



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TRUSTED
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Quality resources you can trust.



DESIGNED
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SUPPORT
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Every step of the way.